REMARKS

Claims 1-21 are pending in the present application. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the remarks contained herein.

SPECIFICATION

Applicant has amended the specification to correct errors in the reference numbers that were identified by the Examiner. No new matter has been presented.

REJECTION UNDER 35 U.S.C. § 102

Claims 1-6, 8-9, 11-13, 15-20 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Logan, III (U.S. Pat. No. 6,243,857). This rejection is respectfully traversed.

Referring now to Claim 1, Logan does not show a reason code module for assigning first and second reason codes to first and second flowchart blocks to capture operational modes of the process.

Logan is directed towards the debugging of flowcharts. **Col 4, lines 1-66.** As best understood by Applicant, the debugging is performed during a debugging phase before the flowchart is stable. **Id.** When an interrupt occurs in the flowchart, Logan displays the flowchart block(s) that are being executed when the interrupt occurs. **Id.** Logan expressly states that:

> By default, the debugger comes up enabled. The debugger can be disabled through the toggling of the tool bar button. This option can be used to speed up performance once the application is stable.

Col. 8, lines 46-49.

Therefore, as best understood, Logan intends for the debugger to be run while the flowchart program is unstable. In other words, once the flowchart is operational, the debugger is not intended to be used.

Furthermore, the debugger only identifies the flowchart block(s) that are being executed when the interrupt occurs. Specifically, Logan states:

> Again, as will be described later, in the debugging phase of the machine control system, the debugger 34, upon interrupt of the execution of the flowchart, takes control over the machine control system and displays a highlighted flowchart element on the display or monitor 24, which flowchart block is the one being executed at the time of the interrupt of the machine control. Alternatively, as will be seen, the monitor 24 may display a listing of all of the flowchart block numbers, which block numbers correspond to the blocks being executed at the time of the interrupt. From that display, one can call up through the debugger the particular flowchart block, change its value via the keypad 32, and through a single scan execute the altered program to ascertain if the machine is behaving in the manner prescribed.

Col. 4, lines 1-15.

Therefore, Logan can identify the mode of the flowchart at the point of the interrupt during debugging. In contrast, the present invention assigns multiple reason codes to flowchart blocks and captures operational modes of the process. The present invention is not intended to be used to debug unstable flowchart code. Rather, once the flowchart code is stable, the present invention tracks operation modes of the process

For the foregoing reasons, Applicant believes that Claim 1 is in condition for allowance.

Referring now to Claim 6, Logan does not show, teach or suggest a performance analysis module for recording the reason codes. As set forth above, Logan operates the debugger before the flowchart becomes stable or

operational. Logan does not show, teach or suggest a performance analysis module that records reason codes. The reason codes reflect operational modes of the process. Once recorded, the captured reason codes allow the performance of the process to be analyzed.

For the foregoing reasons, Applicant believes that Claims 1 and 6 are in condition for allowance. Claims 2-5 and 7-9 are directly or indirectly dependent upon Claims 1 and 6 and are allowable for the same reasons.

Referring now to Claim 11, Logan does not show, teach or suggest a reason code module associated with the flowcharting module that assigns first and second reason codes to the first and second flowchart blocks to capture operational modes of the process.

As was set forth above, Logan displays a flowchart block that is being executed when an interrupt occurs. Logan operates the debugger when the flowchart is not stable. Once the flowchart is stable, Logan suggests disabling the debugger to improve performance. Therefore, Logan teaches away from the present invention and does not capture operational modes of the process.

In contrast, the reason code module captures operational modes of the process using reason codes that are assigned to the flowchart blocks. Applicant's device operates when the flowchart is operational – e.g., by capturing operational modes of the process.

For the foregoing reasons, Applicants believe that Claim 11 is allowable over the prior art of record. Claims 12-14 are either directly or indirectly dependent on Claim 11 and are allowable for the same reasons.

Referring now to Claim 15, Logan does not show, teach or suggest assigning first and second reason codes to the process by the first and second flowchart blocks in the flowchart source code to capture operational modes of the process.

As was set forth above, Logan displays a flowchart block that is being executed when an interrupt occurs. Logan operates the debugger when the flowchart is not stable. Once the flowchart is stable, Logan suggests disabling the debugger to improve performance. Therefore, Logan teaches away from the present invention and does not capture operational modes of the process.

For the foregoing reasons, Applicants believe that Claim 15 is allowable over the prior art of record. Claims 16-21 are either directly or indirectly dependent on Claim 15 and are allowable for the same reasons.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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